



Information needs behaviour of rice growers under seed village programme in district Baramulla (J&K)

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ABSTRACT

The information needs behaviour of rice growers refers to the way in which rice growers seek, access, evaluate and use information to make informed decisions related to rice cultivation practices, crop management, input use, market prices, climate variability, and risk management under seed village programme was conducted in five purposively selected Divisions of Baramulla district, which have the Seed Village Program under the rice crop. Data was personally collected by researcher through well-structured interview schedule. The majority of rice growers in the sub-division Pattan reported, that their information needs was more on government subsidies with SINI value (94.28). The least preferred information needs was storage facilities with SINI value (59.14) of the rice growers. In sub-division Sopore, it was observed, that information needs of rice growers were more on government subsidies with SINI value 92.59. The least preferred information needs were storage with SINI value (56.30) of the rice growers. Whereas, in the sub-division Tangmarg, it was found that information needs was more on government-subsidies and pest management with SINI value 90.00. The least preferred information needs was storage with SINI value (40.00). In sub-division Baramulla, the information needs of rice grower was more on disease management with SINI value 97.53. The least preferred information needs was storage with SINI value (32.88) of the rice growers. The majority of rice growers in the sub-division Rohamma reported, that the information needs was more on government subsidies and disease management with SINI value (81.00). The least preferred information needs was storage with SINI value (22.00) of the rice growers. However, the overall information needs of all the sub-divisions indicated, that their information needs was more on government-subsidies with SINI value 90.90. The least preferred information needs was storage with SINI value (48.58).

Key words: Behaviour, growers, information, needs, rice, seed village

Being one of the most significant cereal crops in the world, paddy is grown all over the world. In 2022–2023, the USDA revised its estimate of global rice production downward by 0.3 million tonnes to 503 million tonnes (milled basis), which is more than 2 percent less than the previous year's record and the first year-to-year fall since 2015–16. China, Mexico, Russia, Ukraine and the United States all had their output estimates cut, more than offsetting an increase in India. This month, the global consumption and residual use prediction was reduced by 0.8 million tonnes to 516.1 million, with China and Cambodia being primarily responsible for the decrease. The prediction for the world's ending stocks in 2022–2023 was lifted by 1.3 million tonnes to 170.0 million tonnes, while forecasts for Bangladesh, Brazil, Cambodia and India were also upgraded this month. Yasangi (Rabi) paddy acreage increased by 31.95% to 46.25 lakh hectares (114.25 lakh acres) as of February 3, 2023, according to the Ministry of Agriculture, compared to 35.05 lakh hectares (86.61 lakh acres) at the same time previous year. Telangana (18.07 lakh ha; 44.65 lakh acres), Tamil Nadu (12.21 lakh ha; 30.17 lakh acres), Andhra Pradesh (5.51 lakh ha; 13.62 lakh acres) and Assam (1.84 lakh ha) had higher acreage coverage (4.55 lakh acres). The estimated total output of rice in India for 2022–2023 was 104.99 million tonnes, according to the 1st Advance Estimates of Production of Food Grains (Agricultural Market Intelligence Centre, PJTSAU,

Paddy Outlook – February 2023). In Jammu and Kashmir, where 0.267 million hectares of rice were planted during 2020–21, 5.816 lakh tonnes with an average yield of 21.74 qts/ha were produced, while in Kashmir Valley, where 1.33 lakh hectares of rice were grown, 3.41 lakh tonnes with an average yield of 25.59 qts/ha were produced. The J&K (UT) Baramulla District produced 20612 hectares of rice in 2020–21 (Anonymous, 2021).

MATERIALS AND METHODS

The research design utilized in this study was ex-post-facto because phenomena had already occurred. The current research was conducted in the Kashmir valleys district of Baramulla, which was selected for a seed village programme under rice from 2018 to 2020. In District Baramulla, totally six Agricultural Sub Divisions, out of which five Agricultural Sub Divisions namely Baramulla, Pattan, Sopore, Rohamma and Tangmarg from the twelve selected agricultural zones in twenty five villages of District Baramulla. The study had a total of 310 growers that were part of the Seed Village Program. In this study, Information needs has been studied for farmers. For assessing rice related information needs, schedules were developed separately. Information related to rice such as inputs availability, cultural practices, post-harvest practices, market related information and credit related informations were assessed. To assess the information needs of respondents, they were asked to give responses on provided list of informations according to their priority. A Likert type scale was used for getting responses on a 5-point scale ranging from “very important information” to “not important information”. A score of 5 was given to very important information, 4 to somewhat important information so on and so forth. To measure the information needs of the stakeholders on rice cultivation modified Standardized Information Need Index (SINI) developed by Kabir *et al.*, (2014) was used with following formula:

$$\begin{aligned} \text{INI} &= \text{InVI} \times 5 + \text{InSI} \times 4 + \text{InN} \times 3 + \text{InLI} \times 2 + \text{InNI} \times 1 \text{ Where,} \\ \text{INI} &= \text{Information Need Index} \\ \text{InVI} &= \text{Number of respondents with very important information needs} \\ \text{InSI} &= \text{Number of respondents with somewhat important information needs} \\ \text{InN} &= \text{Number of respondents with neutral information needs} \\ \text{InLI} &= \text{Number of respondents with less important information needs} \\ \text{InNI} &= \text{Number of respondents with not important information needs} \end{aligned}$$

$$\text{Standardized Information Need Index (SINI)} = \frac{\text{Computed Information Need Index}}{\text{Possible highest Information Need Index}} \times 100$$

Based on the index value information, needs were prioritized and highest value was arranged in descending order.

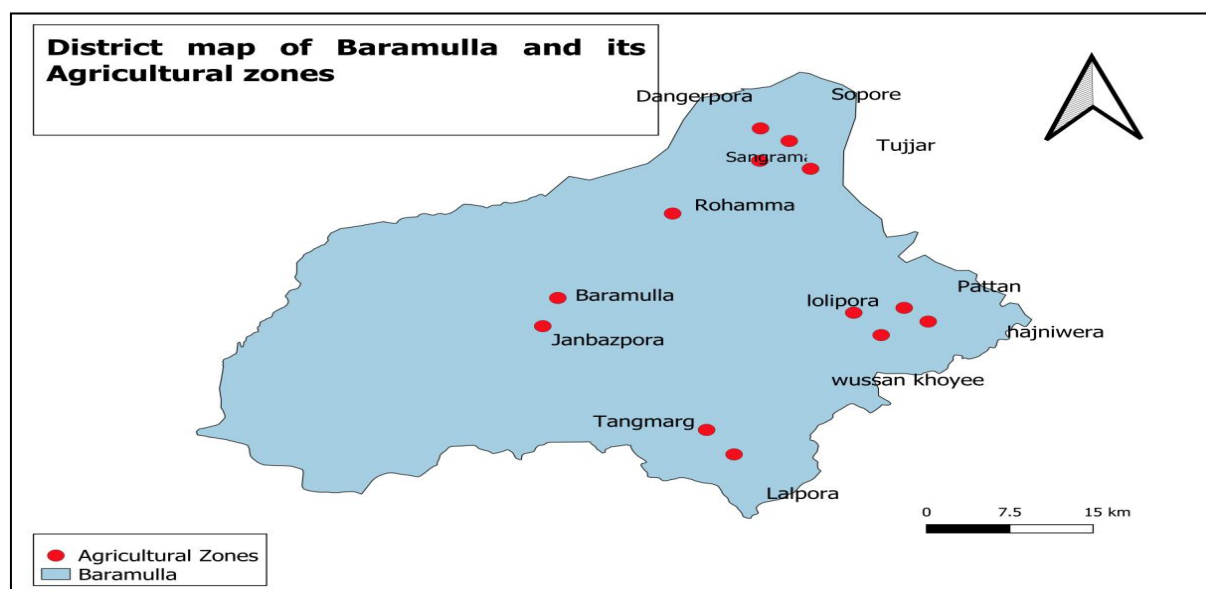


Fig. 1: Map of district Baramulla

RESULTS AND DISCUSSION

According to Table 1 revealed, that in sub-division Pattan, which has been listed under 21 major dimensions and ranked, based on the standard information need index (SINI) value, using a Likert type scale on a five point continuum of importance from very important to not important reveals, that information related to government-subsidies has ranked I with SINI value 94.28, whereas information related to soil health (87.43) have scored rank II and disease management (87.14), local market price(87.14) both have scored third rank. These information needs were followed by price and sources of inputs with the value of (86.00), pest management (84.86), time of sowing (83.71), method of planting (83.43), seed treatment (83.14), The least preferred information needs were crop rotation (79.14), credit and fertilizer application (77.43), water management (76.86), weed management (76.57), machinery (73.43), grading (73.14), weather (72.57), harvesting and marketing and trade with the value (72.28), seed variety (68.86) and storage (59.14), as reported by the rice growers. Further perusal of the data presented in the Table 1 revealed, that in sub-division Sopore, the information related to government-subsidies has ranked 1st with SINI value 92.59, whereas, information related to pest management (84.30) has scored 2nd rank and disease management (84.00) with rank 3rd. These information needs were followed by local market price with the value of (82.07), Soil health (79.85), price and sources of inputs (79.55), crop rotation (76.00), seed treatment (70.81), machinery (70.67), time of sowing (69.03), and method of planting (67.70), weather (66.37), fertilizer application (63.85), seed variety (63.26) and weed management (63.23). The least preferred information needs were credit (62.67), water management (62.52), grading (59.70), marketing and trade (57.48), harvesting (57.18) and storage (56.30) as reported by the rice growers. Further perusal of the data presented in the Table 1 revealed, that in sub-division Tangmarg, the information related to government-subsidies and pest management have ranked 1st with SINI value 90.00. Whereas, information related to disease management (85.00) has scored 2nd rank and price, sources of inputs and weather (78.33) have scored 3rd rank. These information needs were followed by local market price and soil health with value of (75.00), machinery and fertilizer application (68.33), credit and water management, weed management (66.67), crop rotation (65.00), seed variety and marketing and trade (61.67), method of planting (58.33). The least preferred information needs were seed treatment (51.67), time of sowing (50.00), harvesting and grading with the value (48.33) and storage (40.00) as reported by the rice growers. Further perusal of the data presented in the Table 1 revealed, that in sub-division Baramulla, the information related to disease management ranked 1st with SINI value 97.53. Whereas, information related to government subsidies (87.40) rank 2nd and pest management (86.57) rank 3rd. These information needs were followed by local market price with the value of (78.63), price and sources of inputs (77.81), marketing and trade (75.07), machinery (74.79), soil health (71.23), fertilizer application (70.68), method of planting (66.85), water management and weed management (66.57), weather (66.30), time of sowing (60.55), crop rotation (58.08) and seed treatment (56.99). The least preferred information needs were credit (50.96), seed variety (49.86), grading (46.30), harvesting (43.83) and storage (32.88) as reported by the rice growers.

Further perusal of the data presented in the Table 1 revealed, that in sub-division Rohamma, the information related to government-subsidies and disease management have ranked 1st with SINI value 81.00. Whereas, information related to pest management (78.00) have rank 2nd and price and sources of inputs (76.00) with rank 3rd. The information needs were followed by fertilizer application and marketing and trade (73.00), time of sowing and method of planting and local market price with the value of (72.00), soil health (70.00), crop rotation, machinery and weed management (69.00), water management (68.00) and seed treatment (64.00). The least preferred information needs were credit and weather (58.00), seed variety (57.00), harvesting (43.00), grading (38.00) and storage (22.00) as reported by the rice growers. However, in case of overall information needs behaviour of rice growers from all the five sub-divisions data presented in the Table 1 revealed, that information related to government-subsidies has ranked 1st with SINI value 90.90, whereas information related to disease management (85.55) ranked 2nd and pest management (84.77) with rank 3rd. These information needs were followed by local market price and sources of inputs with the value of (81.48), price and sources of inputs (80.32), Soil health (78.71), machinery (72.26), crop rotation and method of planting (71.16), time of sowing (69.81), fertilizer application (69.29), seed treatment (69.16), weather (67.68), weed management (67.55), water management (67.22), The least preferred information needs were marketing and trade (66.13), credit (63.22), seed variety (60.90), grading (57.55), harvesting (56.19) and storage (48.58) as reported by the rice growers.

The possible reason for information needs in the sub-division Pattan was due to increase their production and therefore they sought higher subsidies on agriculture inputs. The main aim behind the soil card was to find out the status of the soil and provide ways to improve it. These findings are in line with Babu (2011), Benard *et al.* (2014), Chauhan and Thakor (2004), Kabir *et al.* (2014), Lwoga (2009), Meitei and Devi (2009), Patel *et al.* (2014), Sarada (2018), Sunil Kumar *et al.* (2018). and Tologbonse *et al.* (2008).

Table 1: Average Standardized Information needs behaviour of rice growers under seed village programme (N=310)

S. No	Information	Average Standardized Information needs Index in Percentage based on the importance					
		(Pattan <i>n</i> ₁ =70) SINI	(Sopore <i>n</i> ₂ =135) SINI	(Tangmarg <i>n</i> ₃ =12) SINI	(Baramulla <i>n</i> ₄ =73) SINI	(Rohamma <i>n</i> ₅ =20) SINI	(N=310) SINI
1.	Soil health	87.43	79.85	75.00	71.23	70.00	78.71
2.	Crop rotation	79.14	76.00	65.00	58.08	69.00	71.61
3.	Credit	77.43	62.67	66.67	50.96	58.00	63.22
4.	Price and source of input	86.00	79.55	78.33	77.81	76.00	80.32
5.	Government subsidies	94.28	92.59	90.00	87.40	81.00	90.90
6.	Machinery	73.43	70.67	73.33	74.79	69.00	72.26
7.	Weather	72.57	66.37	78.33	66.30	58.00	67.68
8.	Seed variety	68.86	63.26	61.67	49.86	57.00	60.90
9.	Seed treatment	83.14	70.81	51.67	56.99	64.00	69.16
10.	Time to sowing	83.71	69.03	50.00	60.55	72.00	69.81
11.	Method of planting	83.43	67.70	58.33	66.85	72.00	71.16
12.	Water management	76.86	62.52	66.67	66.57	68.00	67.22
13.	Weed management	76.57	63.23	66.67	66.57	69.00	67.55
14.	Fertilizer application	77.43	63.85	68.33	70.68	73.00	69.29
15.	Pest management	84.86	84.30	90.00	86.57	78.00	84.77
16.	Disease management	87.14	84.00	85.00	97.53	81.00	85.55
17.	Harvesting	72.28	57.18	48.33	43.83	43.00	56.19
18.	Grading	73.14	59.70	48.33	46.30	38.00	57.55
19.	Local market price	87.14	82.07	75.00	78.63	72.00	81.48
20.	Marketing and trade	72.28	57.48	61.67	75.07	73.00	66.13
21.	Storage	59.14	56.30	40.00	32.88	22.00	48.58
Average Standardized Information Need Index		78.86952	69.95857	66.58714	65.97381	64.90476	70.4781

CONCLUSION

The research revealed that in sub-division Baramulla, the information needs behaviour of rice growers about disease management was with SINI value 97.53. Whereas, in sub-division Pattan, that information related to government-subsidies with SINI value 94.28, followed by sub-division Sopore with SINI value 92.59. Whereas, in sub-division Tangmarg, the information related to government-subsidies and pest management was with SINI value 90.00, respectively. Whereas, in sub-division Rohamma, the information related to government-subsidies and disease management was with SINI value 81.00, respectively. However, in case of overall information needs behaviour of rice growers from all the five sub-divisions, the data revealed, that information related to government-subsidies was with SINI value 90.90.

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